

## REMARKS

The prosecution of this application has been tortuous. Applicant strenuously objects to the piecemeal prosecution and to the repeated change of positions in the Actions and in the interviews. Applicant also strenuously objects to the examiner's refusal to respond to applicant's repeated requests for clarification of the examiner's position, and to the examiner's failure to do so in repeating some of those positions in the latest Action.

It is apparent that the examiner has come to the conclusion that his prior rejections are unsupportable and has completely restarted the examination process in the hopes that he can improve his position, including the citation of new art. It is also apparent that the examiner has become overzealous in his determination to find some basis to reject this application, and applicant respectfully requests that the examiner examine his motives in making the present rejections and immediately recuse himself if he cannot impartially examine this application on its merits.

### **I. The Subject Matter To Which The Application Is Directed.**

This application is directed, *inter alia*, to a small, three dimensional, substantially transparent substrate substantially the entire surface of which is coated so that the light incident on the surface of the substrate from any angle will be preferentially reflected/transmitted. Two specific examples of such small, three dimensional, substantially transparent substrates are disclosed.

The application expressly contemplates the coating of the entire surface of small, three dimensional, substantially transparent substrates known as "gemstones." One of

skill in this art would understand that such gemstones could be found, e.g., in a ring , bracelet, tiara, drop, or pin, small enough to be worn as jewelry on the body or clothing of a person. One of skill would understand that gemstones are looked at rather than looked through, and that gemstones are not used as protective devices to shield the wearer from unwanted ambient radiation. One of skill would understand that gemstones have significant dimensions in all three orthogonal directions, i.e., that they are not flat or curved plates with two major parallel surfaces of substantially the same area. One of skill would understand that the thickness of gemstones is not uniform.

One of skill would understand that Figure 1 is a representation of a vertical cross-section taken through a “brilliant” cut gemstone, so called because the fire generated by the many non-parallel facets and the non-uniform dimensions in the three orthogonal directions. One of skill would understand that the maximum dimensions of such gemstones, when so cut, are approximately the same and that the horizontal cross-sections are generally circular.

One of skill would understand the gemstone could be a material other than a cubic zirconium, and that the shape of the gemstone could be other than the cut illustrated in Figure 1. In other words, one of skill would not understand that neither the material nor the particular shape of the gemstone are critical to the invention, and that the invention relates, *inter alia*, to the coating of the entire surface of a three dimensional substrate not too large to be worn by a person as a gemstone. Should the examiner’s position as to the understanding of one of skill be other than as set out above, applicant again requests that

the examiner specifically set forth his position as to each concept and/or statement with which he disagrees.

The application also expressly contemplates the coating of the entire surfaces of such small substrates for use as “ornaments.” One of skill in this art would understand that such ornaments could be found, e.g., in jewelry worn on the body or clothing of a person, or displayed, e.g., in a dinner table centerpiece or perhaps as spheres used in vases to support flower arrangements. The particular example disclosed is a lead crystal glass turtle. One of skill would understand that such ornaments have significant dimensions in all three orthogonal directions, i.e., that they are not flat or curved plates with two major parallel surfaces of substantially the same area. One of skill would understand that the thickness of such ornaments is not uniform. One of skill would readily understand that a turtle is substantially as long as it is wide with non-uniform dimensions in the three orthogonal directions. One of skill would understand that the horizontal cross-sections of a turtle are generally circular.

One of skill would understand such ornaments could be formed from a material other than a lead crystal glass, and that the shape of the ornament could vary, e.g., a crab, a shrimp, the sun, a crescent moon, a monogram, deer, fox, etc. In other words, one of skill would understand that neither the material nor the particular shape of the object is critical to the invention, and that the invention relates, *inter alia*, to the coating of the entire surface of a three dimensional substrate not too large to be worn by a person as an ornament.

One of skill in this art would understand that this application is not directed to what is essentially a two dimensional object such as sun glasses or an automobile windshield which may be bent or twisted from a planar condition but nonetheless has only a nominal, and uniform thickness and parallel major surfaces.

Such essentially two dimensional objects have three discrete surfaces, i.e., the two major parallel surfaces and the nominal thickness side/end surfaces that connect the major surfaces. One of the major surfaces of such two dimensional objects are often coated, sometimes two, but the utility of such objects generally lies in the preferential rejection of the light incident on one surface to protect the eyes of a viewer on the other side of the object, i.e., the viewer looks through the object rather than at the object, and no light is preferentially reflected from the viewer's side or from the side/end surfaces.

Should the examiner's position as to the understanding of one of skill be other than as set out above, applicant again requests that the examiner specifically set forth his position as to each statement with which he disagrees.

## **II. The Applicable Law.**

A. The patent law does not require *in haec verba* correspondence between the written description and the claims.

B. The combination of references for obviousness requires a motivational teaching.

C. The patent law permits, in predictable arts, the generic claiming of articles specifically disclosed in the specification.

Applicant has cited *Bilstead v. Wakalopulops*, No.13-1528 decided October 7, 2004, where the Federal Circuit reviewed decisions relating to the written description requirement from 1973 to date citing with approval the following as examples of the support of genus claims by the disclosure of a single species in a predictable art:

claim for “an inert fluid” supported by disclosure of “an inert liquid;”

claim for “adheringly applied” supported by disclosure of “applying adhesive;”  
and

claim for “protein content of at least about that of solvent extracted soybean meal”  
supported by disclosure of “solvent extracted soybean meal with a protein  
content of about 50%.”

The Federal Circuit stated “disclosure of only identical half-shells was sufficient written description support for a claim encompassing both identical and non-identical half-shells.”

Applicant has expressly disclosed two species of three dimensional substrates, i.e., sized to be worn by a person as a gemstone and sized to be worn by a person as an ornament. The prior art permitting, applicant is therefor entitled to claims generic to objects that are not too large to be worn by a person.

Applicant has expressly disclosed two species of three dimensional substrates, i.e., a gemstone defined by plural planar surfaces and a turtle defined by plural curved surfaces. The prior art permitting, applicant is therefor entitled to claims generic to the shape of the object.

Since the dimensions of the two disclosed species are non-uniform in all three orthogonal directions, applicant is entitled, the prior art permitting, to claims generic to substrates non-uniformly dimensioned in all three orthogonal directions.

Since both of the species disclosed have at least one cross-sectional area that is generally circular, i.e., a horizontal slice through the turtle adjacent the middle thereof and a plurality of horizontal slices through the gemstone at different elevations, applicant is entitled, the prior art permitting, to claims generic to substrates having at least one generally circular cross-section.

Since both of the two species disclosed have maximum dimensions that are approximately equal in at least two of the three orthogonal directions, i.e., the length and width of the turtle and the length, width and depth of the gemstone, applicant is entitled, the prior art permitting, to claims generic to substrates having dimensions approximately the same in either two or three of the orthogonal directions.

Since neither of the two species disclosed have parallel surfaces, applicant is entitled, the prior art permitting, to claims generic to three dimensional substrates without parallel surfaces.

Despite repeated requests by applicant, the examiner has never challenged applicant's assertion that this is a predictable art, nor applicant's assertion that each of the claims is readable on the drawings and/or expressly disclosed in the written description. If the examiner challenges the foregoing facts or the law, applicant AGAIN requests a clear statement of the examiner's position and the citation of the authority on which the examiner relies.

### **III. The Informalities.**

The examiner's attempt to excuse his repeated failure to respond to applicant's requests for a statement of the examiner's position as to formal matters as moot in view of new art rejections is fatuous - in fact many of the Section 112 rejections are repeated. To the extent that they are not being repeated, the urging of them for the first time in the **eighth** Action is outrageous.

#### **The First Paragraph Rejections:**

Claims 13-15, 27 and 35-48 are rejected, with the examiner asserting that the application fails to disclose any of the limitations as discussed above. Claims 17-20, 22-25, 28, 29 and 31-33 are rejected as failing to disclose the dimensional limitations of these claims.

The examiner errs in requiring *in haec verba* correspondence between the written description and claims and in ignoring what one of skill in the art would understand the application as filed to disclose.

The examiner's citation of art is not understood and an explanation is solicited. If the claims can be read on an automobile windshield of the prior art, then the examiner should make an art rejection, and he has tacitly admitted that this cannot be done by failing to make the rejection. MPEP 2163.04 clearly places the burden on the examiner to present a preponderance of evidence why one of skill would **not** recognize in an applicant's disclosure a description of the invention defined by the claims, and the examiner has made no attempt to do so.

MPEP 2163.05 cited by the examiner makes it clear that even a single species may support a generic claim and that only a reasonable number of species is required. In this predictable art, a single species would be enough, but applicant has provided two examples. The examiner has not even made an effort to show that any removed limitation was described as critical in the application as filed. There is no legal or factual basis for this rejection, and it reflects only the examiner's improper personal desire to craft a rejection.

Claims 13-15, 17-20, 22-25, 27-29, 31-33 and 35-48 are rejected as not being enabling for non-decorative objects. The examiner is once again reminded that the limitation of original Claim that has been omitted is a limitation of the size and shape of the objects, and that there has never been a claim limitation as to the use to which the claimed objects could be put. Even if such a limitation existed (and it does NOT!), the examiner has the burden of showing that the limitation is disclosed as critical, and he has not even attempted to do identify any evidence on which his position is based.

It simply cannot be the examiner's position that the referenced windshield, paint particles, etc. meet the limitations of the claims, for the examiner has not made an art rejection. As earlier explained, the existence of art not within the scope of the claims has no relevance whatsoever. If the examiner contends otherwise, a detailed explanation and the citation of the authority relied upon is solicited.

#### **The Second Paragraph Rejections:**

Claims 17, 34, 46 and 47 are rejected as indefinite. The examiner's comments have been reviewed and amendments made where appropriate. The examiner is advised



that the “size and shape” limitation of Claim 34 limits the **substrate** recited in Claim 28, and thus properly limits the method of Claim 28. The intentional misquoting of the claim to omit reference to the substrate does not bring credit to the examiner or the Office, but may reflect the examiner’s improper motives as earlier referenced.

#### **IV. The Art Rejections.**

##### **Anticipation.**

Claims 1-12 are rejected as anticipated by Austin. Reconsideration is solicited.

Austin discloses the coating of a substrate of uniform thickness on both major and parallel surfaces with a multilayer film structure that is (a) anti-reflecting and UV rejecting (Col. 1, ll. 55-60; col. 2, ll. 46-47). As shown in Figures 6, 8, 11 and 15, the coating does not preferentially reflect light between 400 and 700 nanometers. Because the coating is non-reflective of visible light, it cannot be said to be either ornamental or decorative, and thus in fact teaches away from the present invention. Moreover, Austin’s sunglasses are not three dimensional as contemplated in this application, nor non-uniform in thickness, and they have parallel major surfaces. Finally, the coating of Austin may be over substantially the entire surface of an essentially two dimensional object such as a sunglass lens, there is no disclosure of any coating over substantially the entire surface of a three dimensional object. Clearly Austin does not anticipate the Claim 1 or any claim dependant therefrom and the rejection must be withdrawn.

The examiner’s contention that sunglasses are designed to protect the sight of a blind person is not understood, and certainly is not supported by Austin.

**Obviousness.**

**Claims 1-17, 22-27, 35-43 and 45-47.** These claims are rejected as obvious over Austin in view of (a) Perilloux and (b) Broadhurst and (c) applicant's admission.

Reconsideration is solicited.

The rejection of 35 claims of significantly differing scope, eight of them independent, on the combination of 4 references is manifestly improper and applicant cannot respond to such an omnibus rejection. If the examiner will issue a non-final Action in which the specific references used to reject each claim are identified and the portions of each relied upon and motivation to combine are set out, applicant will respond. Applicant cannot be required to guess as to what parts of which references are being applied to which claims.

Austin has been discussed. Perilloux discloses a sunglass lens that partially reflects a desired color while maintaining neutral transmitted color. (Col. 2, ll. 59-61). As argued in the interview before the examiner and his supervisor, and admitted by the supervisor, the teaching of these two patents is directly opposite, i.e., one non-reflective and the other conditionally reflective. The examiner could not then and can not now find any support in the either of the patents for the combination of the teachings thereof.

Broadhurst discloses that it is common for eyeglass manufacturers to supply a tinted lens having a circular shape. Broadhurst does not disclose that the lens is reflective or decorative of the wearer, the stated purpose being "to change the color of the lenses [the wearer] is looking through," i.e., the view of the wearer is changed rather than the outward appearance thereof. Broadhurst does not disclose that any major surfaces of the

lens is curved or that the lens are three dimensional (or if the thickness is considered not immaterial, that such thickness is nonuniform). Additionally, Broadhurst does not disclose the coating of substantially the entire surface of a three dimensional lens to preferentially reflect light. Broadhurst does not disclose that the maximum dimension in each of three orthogonal directions is the same. Finally, Broadhurst does not disclose any reason for combining the teachings of any two of the cited patents.

The relevance of the “admission” of applicant is not understood. Applicant has stated that the design of films to selectively reflect light is well known, and thus the design of films for the purpose of this application need not be specifically disclosed. Applicant readily agrees that objects that selectively reflect/transmit light are light filters, and that optical filters are generally known for various purposes.

Assuming *arguendo* that one of skill would know how to design a multilayer filter/reflector to preferentially reflect light from a surface as claimed IF ASKED TO DO SO, where is the teaching that small, three dimensional substrates should be so coated over the entire surface thereof, and particularly where the substrate has non-uniform dimensions, or equal maximum dimensions in three orthogonal directions, or a circular cross-section, or a curved surface, or non-parallel major surfaces?

Here there is no relevant teaching, and here the references as a whole teach away from the improper and highly selective combination of features of the prior art as taught only by applicant.

**Claims 17-21, 22-26, 28-44 and 46-48.** These claims are rejected as obvious over (a) Etzkorn (b) in view of Hettich and (c) applicant's admission. Reconsideration is solicited.

The examiner has again rejected a large number of claims, i.e., 28 claims, 7 of them independent, over the combination of three references. Applicant cannot be required to guess as to what parts of which references are being applied to which claims. Any new rejection must be in detail as earlier discussed and non-final.

Eykkorn discloses a process for coating three dimensional glass domes on the inside, or outside, or both, but one of these two surfaces at a time. There is no disclosure of a coating of the entire surface of the solid three dimensional object referenced as a dome, and contrary to the examiner's assertion, there is no disclosure of the same maximum dimensions in the three orthogonal directions. The cited passage refers to a "strongly arched substrate having a rotationally symmetrical shape." While "rotationally symmetrical" may mean a cylindrical cross-section (and thus that two dimensions are the same), "strongly arched" does not suggest that all three dimensions are the same. Moreover, the thickness of the substrate is uniform and the two major surfaces, i.e., the "inside" and "outside" surfaces are thus parallel. Etzkorn discloses multi-layer coatings with selective spectral reflecting power (col.1, ll. 26-29), but does not suggest that the coating reflects preferentially at 400 -700 nanometers.

Hettich discloses the use of a multilayer coating to selectively reflect plural bandwidths of light each only 25 to 50 nanometers somewhere in the range of 300 to 1200 nanometers (col. 2, ll. 13-15), specifically 358, 532 and 1064 nanometers (col.1,

11.58-59). Hettich discloses coating of only one major side of a flat substrate of uniform depth (Fig. 1), and does not disclose that the dimensions of the substrate are equal in any two orthogonal directions, that the substrate has a circular cross-section, or is curved, or has a non-uniform dimension in any direction.

Neither of the cited patents disclose any reason for combining their teachings. The “disclosure of Hettich” on which the examiner relies is not identified, but clearly does not preferentially reflect light between 400 and 700 nanometers as claimed. Therefore, the use of a coating that reflects plural 25 to 50 nanometer bands between 300 and 1200 nanometers cannot aid a rejection based on Etzhorn alone.

The relevance of the “admission” of applicant is not understood. Applicant has stated that the design of films to selectively reflect light is well known, and thus the design of films for the purpose of this application need not be specifically disclosed. Applicant readily agrees that objects that selectively reflect/transmit light are light filters, and that optical filters are generally known for various purposes.

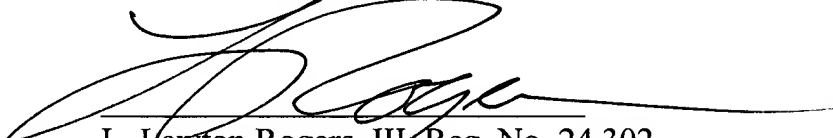
Assuming *arguendo* that one of skill would know how to design a multilayer filter/reflector to preferentially reflect light as claimed IF ASKED TO DO SO, where is the teaching that small, three dimensional substrates should be so coated over the entire surface thereof, and particularly where the substrate has non-uniform dimensions, or equal maximum dimensions in three orthogonal directions, or a circular cross-section, or a curved surface, or non-parallel major surfaces?

Here there is no relevant teaching, and here the references as a whole teach away from the improper and highly selective combination of features of the prior art as taught only by applicant.

Should the examiner persist in any substantive rejection, applicant again requests that the examiner fairly meet applicant's arguments, specifically disagreeing or agreeing with applicant's statements as to what the cited art fairly discloses.

A further and favorable action and the allowance of all claims is solicited.

Respectfully submitted,



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